

FINDING OF NO SIGNIFICANT IMPACT

TENNESSEE VALLEY AUTHORITY

MONTPELIER 161-KV TRANSMISSION LINE

4-County Electric Power Association (4-CEPA), a local power company and distributor of Tennessee Valley Authority (TVA) power, plans to construct a new 161- kilovolt (kV) substation in Montpelier, Mississippi. TVA proposes to supply electric power to this substation by constructing and operating approximately 15 miles of new 161-kV transmission line (TL). The new TL would extend northwest from TVA's existing West Point-Starkville 161-kV TL to the new substation proposed to be located on the northwest corner of the intersection of State Route 389 and Mc Nully Bottom Road. The proposed project would require approximately 182 acres of right-of-way (ROW).

The proposed action is the subject of an environmental assessment (EA) prepared by TVA. The EA is incorporated by reference. The EA addresses the construction, operation, and ROW maintenance of the proposed TL.

Alternatives

Two alternatives (the No Action Alternative and the Action Alternative) were addressed in the EA. TVA also considered other alternatives, including alternative TL routes, in identifying its preferred action alternative.

Under the No Action Alternative, TVA would not construct the 15-mile proposed TL to supply power to a new substation. If the project were cancelled, no direct environmental effects are anticipated, as environmental conditions along the ROW that TVA proposes to acquire would remain essentially unchanged from current conditions. The TVA power system in the Montpelier service area would continue to operate under current conditions, increasing the risk of TL overloading, loss of service, and occurrence of violations of North American Electric Reliability Corporation reliability criteria. TVA's ability to continue to provide reliable service to address economic development and future residential and commercial growth in the area would be jeopardized.

The Action Alternative involves the construction, operation, and maintenance of a 15-mile 161-kV TL to power a new 4-CEPA substation in Montpelier, Mississippi. TVA would provide the standard revenue metering package for 4-CEPA to install its new substation. The TL would be built using single-steel poles centered on new 100-foot-wide ROW. Additionally, TVA would install three switch structures. Two switch structures would be installed within the West Point-Starkville 161-kV TL and the other would be installed within the new TL ROW. Additionally, TVA would upgrade the existing relay and communication equipment at their existing West Point, Columbus Air Force Base, and Lowndes substations. The TVA map board displays would be updated to reflect the new facilities. The Action Alternative is TVAs preferred alternative.

Impacts Assessment

The EA documents potential effects to the following resources: land use; aquatic life; vegetation; wildlife; endangered and threatened species (aquatic animals, terrestrial animals, and plants) and their critical habitats; water quality; floodplains; wetlands; archaeological and historic

resources; aesthetic resources; recreation, parks, and managed areas; and socioeconomics and environmental justice.

If the No Action Alternative were adopted, a decline in the reliability of electric service for some customers would be likely in the future. Service problems and interruptions likely would gradually become more frequent and more severe. These outages would have negative impacts on the ability of businesses in the area to operate. Residents of the area would also incur negative impacts from outages, such as more frequent loss of power. These conditions would clearly diminish the quality of life for residents in the area and would likely have negative impacts on property values in the area. Potential socioeconomic effects under the No Action Alternative would likely affect all populations in the region negatively.

Based on our analysis of the proposed Action Alternative, there would be no effects to geological characteristics. Potential effects from electromagnetic fields would be minor, and the proposed TL would not pose an increased hazard for electric shock or from lightning. Because construction of the proposed line would be short-term, potential effects to local air quality would be minor and insignificant, and the amount of solid waste produced would be minor. Potential effects from noise would be temporary and insignificant. Potential effects on traffic would likely be minor and short-term in nature. Potential effects to local visual quality would be minor. Construction, operation, and maintenance of the proposed TL could cause shifts in local informal recreation, but these would be minor.

Overall, the Action Alternative would have no disproportionate impacts to disadvantaged populations. Providing an additional source of power would help maintain reliable service in the area, thereby avoiding the potential increase in negative impacts from lack of reliability. No noticeable adverse social or economic effects, including changes in local property values, are likely.

Because appropriate best management practices would be implemented during construction, operation, and maintenance of the proposed TL, potential effects to groundwater would be minor and insignificant. For similar reasons, any effects to surface water quality and aquatic life are expected to be temporary and minor. The proposed TL would cross floodplain areas of several streams. Consistent with Executive Order (EO) 11988 (Protection of Floodplains), overhead TLs and related support structures are considered to be repetitive actions in the 100-year floodplain. The conducting wires of the TL would be located well above the 100-year flood elevation. Portions of some access roads would be located within 100-year floodplains. To minimize adverse impacts, any road construction or improvements would be done in such a manner that upstream flood elevations would not be increased. To minimize adverse impacts on natural and beneficial floodplain values, TVA would implement standard best management practices (BMPs) during construction and adhere to the TVA subclass review criteria for TL location in floodplains. As such, construction, operation, and maintenance of the proposed TL would have no significant impact on floodplains. The proposed substation, to be built by 4-CEPA, would be located well outside 100-year floodplains, which would be consistent with EO 11988.

Construction of the proposed TL would result in the clearing of approximately 136 acres of forest. At the local level, this would constitute a minor loss of forest resources. Areas of native vegetation within the proposed ROW would be adversely affected by clearing, but most sites would likely recover to pre-project conditions within a few years. ROW clearing and maintenance would displace various wildlife species, but would not adversely affect local populations.

With the implementation of standards BMPs, the proposed project would not affect the habitat of federally listed bald eagle or wood stork. Therefore, there would be no impacts to these species. The state-listed Bachman's sparrow is not likely to be affected as the records from the area are historic and superior nesting habitat exists outside the project footprint. Populations of Asa Gray's sedge and grooved yellow flax were observed during field surveys of the proposed TL corridor. TVA will require that a feller buncher (or similar equipment) be used in the area where Asa Gray's sedge is found. With implementation of this mitigation measure, the proposed action would not significantly impact Asa Gray's sedge. TVA plans to implement avoidance measures during construction of the proposed TL that would prevent the species from being extirpated from the ROW.

TVA would implement mitigation measures to minimize impacts to the grooved yellow flax (see mitigation section). Most of the proposed ROW adjacent to the grooved yellow flax plants is currently forested and is unsuitable for the species. However, when this forest is cleared for construction and operation of the TL line, it is likely that grooved yellow flax would begin to colonize this newly available habitat. Future ROW vegetation maintenance could negatively affect grooved yellow flax if herbicide is applied indiscriminately, but this outcome can be avoided using TVA's computer-based Sensitive Area Review process to record the location of grooved yellow flax on the ROW. This would trigger coordination between TVA ROW foresters and biologists when the proposed TL requires vegetation maintenance. The resulting vegetation management would use targeted application of herbicide and/or mowing to control woody species while avoiding impacts to grooved yellow flax. With implementation of these measures, the proposed action would result in no adverse effects to these species. In a December 16, 2016, letter, the U.S. Fish and Wildlife Service (USFWS) concurred with TVA's findings.

Approximately 16.6 acres of suitable summer roosting habitat for the federally listed northern long-eared bat occurs in the proposed ROW corridor. To avoid potential direct impacts to the northern long-eared bat, any tree removal in areas determined to provide suitable summer roosting habitat for this species would be restricted between June 1 and July 31 (northern long-eared bat pup season). In a January 12, 2017 letter, the USFWS concurred with TVA's findings that the proposed project may affect the northern long-eared bat, but that the proposed action would not result in prohibited incidental takes pursuant to the final 4(d) rule. Thus, TVA's obligations under Section 7(a)(2) of the ESA have been fulfilled for this project.

The proposed project would span 24.6 acres of wetland, requiring the conversion of about 19.1 acres of forested wetlands to emergent/scrub-shrub wetlands. The forested wetlands would be cleared during construction and then maintained as emergent/scrub-shrub wetlands for the life of the line. Similarly, all wetland areas located within the proposed TL ROW would be subject to periodic vegetation management, and maintained as herbaceous or scrub-shrub wetland vegetation or open water. Efforts were made during the TL siting process to avoid wetlands. However, because of project and topographic constraints, and because of the goal of minimizing impacts to other environmental resources, no practicable alternative was available that would allow complete avoidance of wetlands. Potential wetland impacts would be reduced to an insignificant level during the TL construction and ROW maintenance activities through implementation of appropriate BMPs. Additionally, in accordance with the U.S. Army Corps of Engineer's regulations implementing Section 404 of the Clean Water Act, TVA would mitigate for the conversion of 19.1 acres of forested wetlands to herbaceous/shrub/scrub wetlands. TVA will purchase credits from an approved wetland mitigation bank prior to construction of the proposed TL. The proposed action is consistent with EO 11990 (Protection of Wetlands).

Based on the results of its survey, TVA finds that the project, as currently planned, has the potential to affect eight archaeological sites of undetermined National Register of Historic Places (NRHP) eligibility (22CL504, 22CL519, 22CL780, 22CL1078, 22CL1076, 22CL1077, 22CL1079, and 22CL1087) and one NRHP-eligible site (22CL1054). Access road use, vegetation clearing, and installation of TL structures would have the potential to cause effects to NRHP-eligible or undetermined archaeological sites within the APE. For each NRHP-undetermined or -eligible site affected by access road use or vegetation clearing, TVA will implement the measures described below in order to avoid or minimize project impacts.

- TVA will place a 30 meter buffer surrounding each of the nine sites. Restrictions will be added to the design drawings that must be followed by the work crews when working within 30 meters of any NRHP-eligible or –undetermined archaeological site. The buffers will be marked on all project drawings and work crew will be instructed to adhere to the conditions.
- TVA will restrict equipment use to the existing roads, restrict use of the roads to times when the ground is dry and firm, or require use of low ground pressure equipment, or wetland mats on access roads.
- For sites affected by vegetation (22CL519, 22CL780, 22CL1076, 22CL1077, and 22CL1079), TVA will require the use of a tracked feller-buncher and/or chain saws operated by workers on foot. Vegetation within the site buffer will be cut just above the ground surface and stumps will be left in place.

TVA finds that with the implementation of the proposed design conditions and the above measures, sites 22CL504, 22CL780, 22CL1054, 22CL1076, 22CL1077, 22CL1078, 22CL1079, and 22CL1087 would not be adversely impacted under the proposed action alternative. TVA also finds that the proposed undertaking would have no effects on the eight NRHP-eligible architectural properties identified in the EA.

The installation of one TL structure and four log-type guy wire anchors within the buffer for site 22CL519 could result in an unavoidable adverse effect on this site if determined eligible. TVA submitted these findings to the Mississippi SHPO with a proposal to use a phased approach and conduct further archaeological evaluation (i.e., Phase II survey) of site 22CL519 to determine eligibility of the site. No response was received from the SHPO on TVA's findings of "no historic properties affected" and "no adverse effect" findings within the 30-day period prescribed in the regulations. TVA will continue to work with the SHPO's office and the tribes on avoiding or minimizing the adverse effects on site 22CL519 should this site be determined to be NRHP-eligible. TVA received concurrence on the Phase II survey from the Mississippi SHPO in a letter dated February 2, 2017. If site 22CL519 is determined to be eligible for the NRHP, TVA will further consult with the Mississippi SHPO and interested federally recognized tribes regarding mitigation of adverse effects to site 22CL519 pursuant to a Programmatic Agreement between the parties. TVA also consulted with federally recognized Indian tribes regarding historic properties within the APE that may be of religious and cultural significance and are eligible for the NRHP. TVA received two responses from the Choctaw Nation of Oklahoma, which concurred with TVA's findings, asked to be included in future consultations, and inquired about alternative excavation methods.

Public Review

TVA developed a public communication plan that included a website with information about the project, a map of the alternative routes, and feedback mechanisms. Public officials were briefed on the project. Property owners who could potentially be affected by any of the route

alternatives, along with public officials, were invited to a project open house. TVA used local news outlets and notices placed in the local newspapers to notify other interested members of the public of the open house. The open house was held on December 11, 2014 in West Point, Mississippi. At the open house, TVA presented a network of alternative TL routes, comprised of 16 different line segments, to the public for comment. A 30-day public review and comment period was held following the open house, and TVA accepted public comments on the alternative TL routes and other issues.

Mitigation

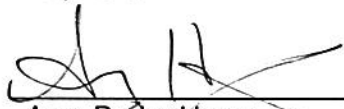
TVA will implement the routine environmental protection measures listed in the EA. In addition to those routine measures, the following non-routine measures will be implemented to reduce potential adverse environmental effects.

- To compensate for the conversion of approximately 19.1 acres of forested wetlands to herbaceous/shrub/scrub wetlands, TVA will mitigate the loss of trees by purchasing wetland mitigation credits prior to construction of the proposed transmission line.
- To avoid potential impacts to the Asa Gray's sedge, TVA will require that a feller-buncher (or similar equipment) will be used in the area where the species is found.
- To prevent the grooved yellow flax from being extirpated from the ROW, TVA would follow the following mitigation measures.
 - Construction will consult with a TVA botanist before clearing and construction to coordinate avoidance measures and access in this portion of the ROW.
 - The location of the grooved yellow flax would be included in TVA's sensitive area review database.
- To remove any potential for direct effects to northern long-eared bat, any tree removal in the 16.6 acres of suitable summer roosting habitat would occur between August 1 and May 31
- For each National Register of Historic Places undetermined or eligible site affected by access road use or vegetation clearing, TVA will implement the below conditions in order to avoid or minimize project impacts. TVA finds that with adherence to these conditions, the proposed action would not result in adverse effects to sites 22CL504, 22CL780, 22CL1054, 22CL1076, 22CL1077, 22CL1078, 22CL1079, and 22CL1087, should these sites be eligible for the NRHP.
 - TVA will place a 30-meter buffer surrounding each of the nine sites. Restrictions will be added to the design that must be followed by the work crews when working within 30 meters of any NRHP-eligible or NRHP-undetermined archaeological site. The buffers will be marked on all project drawings and work crews will be instructed to adhere to the conditions.
 - TVA will restrict equipment use to the existing roads, restrict use of the roads to times when the ground is dry and firm, or require use of low ground pressure equipment, or wetland mats on access roads.

- For sites affected by vegetation clearing (22CL519, 22CL780, 22CL1076, 22CL1077, and 22CL1079), TVA will require the use of a tracked feller-buncher and/or chain saws operated by workers on foot. Vegetation within the site buffer will be cut just above the ground surface and stumps will be left in place.
- TVA will execute and implement a Programmatic Agreement with the Mississippi SHPO to fulfill its obligations under Section 106 of the NHPA for the as provided for in 36 CFR § 800.14(b)(3)). This agreement will identify measures to mitigate adverse effects to site 22CL519 if this site is determined to be NRHP-eligible.

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, we conclude that the proposed action of constructing a 15-mile long 161-kV TL to supply power to the Montpelier service area and new 4-CEPA substation would not be a major federal action significantly affecting the environment. This finding of no significant impacts is contingent upon adherence to the mitigation measures described above. Accordingly, an environmental impact statement is not required.



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Date Signed